

REMARKS/ARGUMENTS

In response to the Office Action of October 6, 2005, Applicant respectfully requests that the Office enter the amendments set forth above and consider the following remarks. By this response, Applicant amends claims 6, 11, 12, 14, 17, 20, 23, 27, 28, 29 and 31, adds new claim 33, and cancels no claims. After entry of this paper, claims 3-8, 10-15 and 17-33 will be pending in this application.

In the Office Action, the Examiner rejected claims 3-8, 10-15 and 17-32 under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 5,115,506 to Cohen *et al.* ("Cohen").

Rejections under 35 U.S.C. § 102(b)

Claims 3-8, 10-15 and 17-32 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Cohen.

Applicant respectfully disagrees and submits that claims 3-8, 10-15 and 17-32 are allowable for at least the reasons set forth below. Applicant also submits that these claims are also allowable for the reasons articulated in Applicant's earlier Responses (dated 3/29/04, 10/27/04, 6/13/05, and 7/25/05), which are incorporated herein by reference.

Independent claims 6, 20, 23, 27 and 29

With respect to independent claims 6, 20, 23, 27 and 29, Applicant has carefully considered Cohen, including the sections cited by the Examiner (col. 3, lines 8-28 and col. 4, lines 8-48; OA, page 15, section 4.a.), and cannot find support for the Examiner's position. In sum, Cohen discloses only switching of exception registers for the *entire* set of general purpose registers, and thus does not teach or suggest "a set of exception registers that are switched for a *subset* of said set of general purpose registers," as recited in these claims. Indeed, the sections cited by the Examiner confirm that the full-set register switching of Cohen does not correspond to the "subset of said set of general purpose registers" switched in claims 6, 20, 23, 27 and 29. For example, Cohen states that "[t]he alternate register set 18 duplicates the registers in the normal register set 16" such that the processor "will access and use either the normal register set 16 or the

alternate register set 18, but never both register sets at the same time." Col. 3, lines 11-15 (emphasis added.) The other section cited by the Examiner also confirms the switching of complete register sets as opposed to subsets. See, e.g., col. 4, lines 30-33. Such mutually exclusive implementation of full register sets directly conflicts with the subset switching recited in claims 6, 20, 23, 27, and 29. Hence Cohen's replacement and manipulation of full register sets cannot teach, *inter alia*, "a set of dedicated exception registers ... switched for a subset of said general purpose registers during servicing of an exception."

Nevertheless, without acquiescing to the rejection and in the interest of expediting prosecution, Applicant hereby amends independent claims 6, 20, 23, 27, and 29 to further obviate the present rejections. For example, claim 6 now recites "wherein at least one general purpose register that is not switched to service exceptions is configured to allow access by said processor during said servicing of an exception," claim 20 recites "wherein at least one general purpose register that is not switched to service exceptions is configured to allow modification of the register states by said processor during said servicing of an exception," claim 23 recites "wherein at least one general purpose register that is not switched to service exceptions is configured to allow access by said processor during said servicing of an exception such that said processor can modify register states of said at least one general purpose register," and claims 27 and 29 recite "wherein at least one general purpose register that is not switched to service exceptions is configured to be read and written directly by said processor during said servicing of an exception." Applicant respectfully submits that these recitations even more clearly distinguish the claimed invention since Cohen's mutually exclusive implementation of register sets fails to allow any processor access or modification of such general purpose registers whatsoever.

For at least the foregoing reasons, Cohen does not anticipate Applicant's amended claims 6, 20, 23, 27, and 29. Accordingly, Applicant requests that the rejection of claims 6, 20, 23, 27, and 29 under 35 U.S.C. § 102(b) be withdrawn and the claims allowed.

Additionally, claims 3-5, 7-8, 21-22, 24, and 30, which directly or indirectly

depend from independent claims 6, 20, and 29, are allowable for at least the same reasons stated above. Accordingly, Applicant respectfully requests that the rejection of claims 3-5, 7-8, 21-22, 24, and 30 under 35 U.S.C. § 102(b) be withdrawn and the claims allowed.

Independent claims 11, 12, 14, 17, 28, and 31

Without acquiescing to the rejection and in the interest of expediting prosecution, Applicant has amended claims 11, 12, 14, 17, 28, and 31 to further obviate the rejection. Specifically, independent claims 11, 12, 14, 17, 28, and 31 have been amended to recite “wherein during servicing of an exception, a subset of said set of general purpose registers are not replaced with an alternate set and the subset of said set of general purpose registers that are not replaced with an alternate set allow data sharing between exception processing and normal execution.” Applicant respectfully submits that Cohen does not teach all of the recitations of amended claims 11, 12, 14, 17, 28, and 31. Instead of teaching “a subset of said set of general purpose registers ... not replaced [that] allow data sharing between exception processing and normal execution,” the registers 24 and portions of Cohen cited by the Examiner (col. 4, lines 8-55) describe registers that are not duplicated at all (i.e., during exception processing). Col. 4, lines 49-51. Further, Cohen states that “anytime that an interrupt routine will affect the data in any of these other registers 24, the interrupt routine must stack those registers that it is going to affect.” See, e.g., col. 4, lines 53-56 and lines 64-68. Thus, the other registers 24 of Cohen are simply stacked without enablement of data sharing functionality relating to exception processing. In contrast, the general purpose registers set forth in amended claims 11, 12, 14, 17, 28, and 31 are involved with exception processing, as recited in each of the claims, and “allow data sharing between exception processing and normal execution.”

For at least the foregoing reasons, Cohen does not anticipate Applicant's amended claims 11, 12, 14, 17, 28, and 31. Accordingly, Applicant requests that the rejection of claims 11, 12, 14, 17, 28, and 31 under 35 U.S.C. § 102(b) be withdrawn and the claims allowed.

Additionally, claims 10, 13, 15, 18-19, 25-26, and 32, which directly or indirectly

depend from independent claims 12, 14, 17, and 31, are allowable for at least the same reasons stated above. Accordingly, Applicant respectfully requests that the rejection of claims 10, 13, 15, 18-19, 25-26, and 32 under 35 U.S.C. §102(b) be withdrawn and the claims allowed.

Applicant also submits that new claim 33 does not raise new issues, present new matter or necessitate a new search, and is also allowable over Cohen. Specifically, new claim 33 recites subject matter consistent with the existing claims, and thus does not raise new issues, present new matter, or require any additional search by the Examiner. Additionally, claim 33 is allowable, inter alia, because it includes recitations the same as or similar to those discussed above and even further clarifies the claimed subject matter from Cohen. Thus, the subject matter of the newly presented claim 33 has already been before the Office, no new matter or issues are presented, and it is patentable over the art of record. Accordingly, Applicant respectfully requests allowance of new claim 33.

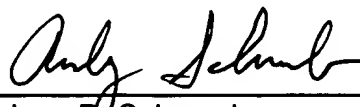
In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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